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INDUSTRY AND POLICY DEVELOPMENTS IN WORLD SHIPPING AND THEIR IMPACT ON DEVELOPING COUNTRIES

Report by the UNCTAD secretariat

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INTRODUCTION

(i) The suspended Committee on Shipping in sub-section I of resolution 65 (XIV) expressed its concern about the increasing structural problems facing the shipping industry of developing countries and considered that sustained efforts should be made to promote an increasing participation of developing countries in the world maritime sector. Consequently, it requested the UNCTAD secretariat "to analyse the on-going structural and technological developments in the maritime sector and to identify the scale and nature of the technology gap experienced by developing countries and report thereon to the Committee on Shipping at its fifteenth session. The report should take into account industry developments in all sectors of maritime transport as well as changes in the shipping policy framework based on various national legislations and multilateral agreements. The report would identify measures which would aim at promoting the participation of developing countries by reducing the technology gap and adapting to new forms of transport organization".

(ii) The present document was prepared by the UNCTAD secretariat in response to this request. It reviews the situation of world shipping, particularly in relation to technological, structural and organizational changes that have characterized the industry and domestic and international policy measures that have been taken to react to, initiate or accentuate such changes. In the process of preparing this document, a note verbale was sent by the Secretary-General of UNCTAD to Governments of developing countries, requesting relevant information particularly with regard to shipping policy measures adopted by the Governments concerned.

(iii) Based on the Cartagena Commitment, the Trade and Development Board at its thirty-eighth session adopted the terms of reference of the Standing Committee on Developing Services Sectors: Fostering Competitive Services Sectors in Developing Countries. In the field of shipping, it was decided that the Committee should, *inter alia*, focus on:

- reviewing shipping policies, in order to identify elements leading to the development of competitive shipping service sectors in developing countries;
- reviewing technological developments that affect maritime transport;
- consideration of conditions facilitating intra- and inter-regional cooperation.

Bearing in mind the directions indicated by the terms of reference, the present document can be considered to provide a basis for an in-depth analysis of developing countries' policies bearing in mind the generally prevailing tendency for progressive liberalization as well as the subsequent policy changes already observed in a number of countries.

(iv) In the course of preparation of this document, the Secretary-General of UNCTAD decided, in view of the importance of the new policy approach, to convene a meeting of eminent persons of the shipping industry, government and academics to review and discuss the document and to make recommendations for future action. * While proposing minor changes to the document, the Group endorsed its content and made a number of recommendations on future work to be undertaken by UNCTAD. These are reflected in chapter V of the present report.

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* The report of the Group is contained in document TD/B/CN.4/6.

Chapter I

WORLD SHIPPING DEVELOPMENTS AND PERSPECTIVES

A. General developments

1. The second half of the 1980s and the early 1990s have been marked by a series of important political and technological developments which will have a profound influence on shipping during the next decade. On the political side, the most important event has no doubt been the developments in Central and Eastern Europe leading - apart from developments internal to the region - to a new and still evolving relationship with the West. Other important developments concern new alliances between countries affecting the flow - or potential flow - of goods, services and persons across national boundaries. Mention may be made, in particular, of the Free Trade Agreement(s) between Canada and Mexico and the United States of America, the formation of the EEC Single European Market in 1993 and its possible enlargement by several countries, and the EEC-EFTA agreement towards the establishment of the European Economic Space (EES). Improved relations between China and a number of Western countries, as well as with Japan, and the establishment of Hong Kong as a Special Autonomous Region within China as of 1997, should also be mentioned. New alliances have also been formed between developing countries in different areas of the world while existing alliances have received a new impetus. In Latin America, for instance, a recent agreement between member countries of the Andean Pact (Cartagena Agreement) provides for a re-orientation of their economies towards a more competitive and export-oriented system and a greater degree of integration. Similar developments are taking place in Asia and, to a lesser extent, in Africa. A common characteristic of all such developments is a strong commitment to reduced government control or intervention in many fields and the promotion of a liberalization of markets. Following a first "wave" of liberalization introduced in a number of countries, however, disruptive effects have already been observed on the global scale, as witness by the slow progress of the Uruguay Round in GATT.

2. Nevertheless, and irrespective of the final outcome of the Uruguay Round negotiations, it may be expected that the general movement towards a greater liberalization of markets (including world shipping markets) will continue at least for some time during the 1990s. This movement has been stimulated by the desire and actions of countries in Central and Eastern Europe to move towards or institute a market economy. Many developing countries are considering similar actions and some have already taken measures to that effect. As a corollary to liberalization, the role of government in many spheres of activity is being reduced while government-owned enterprises are being privatized, or at least commercialized.

3. For many developing countries and countries of Central and Eastern Europe, the decision to liberalize - and possibly to privatize - is difficult to implement. The speed at which liberalization will take place and the timing for specific actions required also pose particular problems. In general, for those countries which have exercised a strong governmental involvement in shipping for several decades, the conflict between liberalism and interventionism in maritime affairs is difficult to solve. Many countries, in particular developing ones, may also be concerned that certain forms of liberalization may be too disruptive and could lead to the disappearance of the national shipping industry. As many of these countries attach great importance to maintaining a national fleet for both economic and other reasons, liberalization of trade in shipping services may require a gradual, carefully phased approach. [1/]

4. A continuous stream of technological advances has also affected - and continues to affect - the world economy and existing organizational and social structures. Apart from the introduction and development of new and improved products that technological advances make possible *per se*, these lead in many cases to important consequential changes in the organization of economic activity. In particular, the growing division of labour leads to increasing numbers of separate economic activities (production of components) to produce a given end product. Successive reductions in transport and communications costs have also widened many markets. Thus, on average, more than half of the output of firms in industrialized countries is now produced and/or sold abroad while the same proportion of raw materials or intermediate products is imported from abroad (and may possibly be purchased from foreign affiliates). Consequently, many markets have become increasingly transnational [2/] and interdependent. There is likely to be a continuing growth of transnational corporations involved in regional or global production and marketing strategies through the ownership and management of geographically dispersed but interdependent assets. This trend towards globalization of production and of markets will no doubt pose enormous challenges for the next decade and will strongly influence production and transportation patterns and requirements. These developments may pose new challenges for national Governments - particularly of developing countries - in the management of their economic and social development.

5. Apart from the challenges posed by the political and technological developments described above, a number of other important factors will considerably influence the course of events during the next decade. Thus, the large accumulated national budget and foreign trade deficits of certain countries and decisions taken to reverse this situation could cause some disturbances in the international monetary equilibrium. This could lead to pressure towards re-alignment of currencies and domestic economic policies and might have a destabilizing effect on world economic and trade relations. Equally, the continuing debt and commodity problems of a number of developing countries are likely to continue to constitute important constraints on their economic development. [3/]

6. Another important concern which is likely to require attention with respect to practically all economic activities and decisions is the world environment. Environmental issues will no doubt be a major challenge for the world community in the future and decisions taken in this respect may have long-term and far-reaching consequences for international trade and shipping. Developing countries in particular will be faced with a plethora of difficult decisions to be taken and criteria to be established for environmentally sustainable economic and social development.

7. The above-mentioned developments will no doubt profoundly affect international trade and shipping questions during the next decade although it is not possible to translate them into quantitative terms. Within this overall framework, the challenges facing developing countries will be formidable. There is, therefore, an urgent need to consider possible global, regional and subregional strategies which may assist this group of countries in surmounting the obstacles. The following chapters attempt to provide an overview of expected world shipping developments during the next decade and to suggest some possible shipping policy orientations for developing countries which would better enable them to meet the challenges ahead.

B. Bulk trades

8. Following a period of two decades of rapid growth in international trade and shipping up to the mid-1970s, the stagnation and recession of world trade that followed the series of "oil shocks" in the 1970s and early 1980s strongly affected the shipping industry. The resulting long-term development of international seaborne trade and consequent shipping requirements are reflected in tables 1 and 2.

1. Tanker cargoes

9. With regard to petroleum trades, a number of important developments are reflected in the data contained in tables 1 and 2 and deserve mentioning. These are:

- an absolute reduction in trade with petroleum and petroleum products until 1985 based on the emergence of new, more energy-efficient production processes and other energy-saving measures and the development of alternative energy sources. During the second half of the 1980s, trade picked up again at an average rate of 4.3 per cent per annum;
- the over-proportionate reduction in the requirements for tanker shipping services in terms of ton-miles owing to the geographic diversification of production sources (e.g. North Sea, Alaska, Caribbean).

10. The Middle East will no doubt continue to be the major source of crude oil for some time to come. Nevertheless, the oil market is dominated by importers who are likely to intensify efforts towards diversification of supply sources. Developments in the former USSR and in Central and Eastern Europe may have some effect on the trade in crude oil although this is not likely to be significant in the foreseeable future.

11. With respect to refined product tankers, the trade in refined petroleum products by sea has been steadily increasing while average distances have also increased. This has been largely due to a shift in production facilities from market-based locations closer to areas of production such as the Middle East. This trend is likely to continue in the 1990s as producing countries continue to build refineries. Some petroleum-producing developing countries are likely to increase their participation in refined product transportation, possibly through joint ventures or management contracts. As more oil-refining capacity is established in developing countries, production and exports of liquefied petroleum gas (LPG) is also expected to increase during the 1990s. This, however, is to be seen against considerable newbuilding activities that risk to aggravate supply/demand equilibrium in the short to medium term. Similarly, it can be expected that, in the long term, there is a considerable growth potential for LNG as a clean source of energy. Given the long lead times, however, the anticipated increases in trade will probably not materialize before the end of the decade. [4/]

Table 1

Development of international seaborne trade, 1970 -1990
(Estimates of goods loaded)

	Tanker cargo		Dry cargo				Total (all goods)	
			Total		of which: main bulk commodities			
Year	Millions of tons	Percentage annual change	Millions of tons	Percentage annual change	Millions of tons	Percentage annual change	Millions of tons	Percentage annual change
1970	1 440	13.1	1 165	13.0	448	16.0	2 605	13.0
1980	1 871	-6.6	1 833	3.3	796	4.5	3 704	-2.0
1985	1 459	-2.6	1 923	0.6	857	2.9	3 382	-0.8
1990	1 794	4.4	2 246	1.9	973	0.6	4 040	3.0

For sources and explanatory notes, see UNCTAD, Review of Maritime Transport, 1990 (TD/B/C.4/340), p. 2.

Table 2

World seaborne trade by types of cargo, 1970-1990
(Billions of ton-miles)

Year	Oil		Iron Ore	Coal	Grain a/	Other cargo	Total trade
	Crude	Products					
1970	5 597	890	1 093	481	475	2 118	10 654
1980	8 385	1 020	1 613	952	1 087	3 720	16 777
1985	4 007	1 150	1 675	1 479	1 004	3 750	13 065
1990	6 110	1 610	1 915	1 875	1 125	4 400	17 035

Source: Fearnleys Review 1990 (Oslo) quoted from UNCTAD, Review of Maritime Transport, 1990 (TD/B/C.4/340), p. 3.

a/ Including wheat, maize, barley, oats, rye, sorghum and soya beans.

12. As far as the supply of tanker tonnage is concerned, the world tanker fleet is characterized by relatively old vessels, with an average age of over 15 years. Thus, tanker tonnage constitutes the oldest segment of world shipping. Given the prevailing over-capacity in the tanker market [5/] as well as demand trends, it may be assumed that the 1990s will not see net additions to the tanker fleet but rather that investments will be limited to replacement.

13. The pace of tonnage replacement will largely depend on the implementation of agreed safety requirements such as double hulls for particular types of tankers, the effective implementation of the decision taken by some oil majors to limit the age of VLCCs employed and overall demand for shipbuilding. Both these elements can be expected to force up prices for tankers considerably. Given the increasing scarcity of building berths based on shipbuilding capacity reductions in the 1980s, prices had already exploded between 1987 and 1990. During this period, indicative prices for a 250,000 dwt tanker doubled from $US 46 million to $US 90 million. [6/] Given the upward pressure on

building prices, owners might choose to delay the replacement of existing tonnage, until a point in time when national safety and environmental regulations as well as charterers' requirements will considerably affect possible employment patterns for old tonnage and/or when levels of freight rates justify investment in new tonnage.

2. Dry bulk trades

14. Seaborne trade in dry bulk cargoes has shown a more stable trend over the last 20 years than petroleum trades. Nevertheless, between 1982 and 1987 dry bulk shipping markets experienced a recessional phase with rates recovering to levels adequate for most owners only since 1987/1988. Like earlier years, future developments of bulk trades will show considerable differences depending on the type of commodity. Thus, it is expected that trade in the major single commodity, iron ore, will grow sub-proportionately, while coal trades will show higher rates of increase, albeit not reaching again the growth rates of the early 1980s. However, particularly with regard to coal trades for use in energy production, external factors relating to environmental protection policies [2/] may considerably influence future trading volumes and patterns. While seaborne grain trades may show considerable annual fluctuations, it is nevertheless generally assumed that they will experience a rising trend, particularly to satisfy growing requirements in Central and Eastern Europe and in South East Asia.

15. Although in certain bulk trades (e.g. iron ore) ships move in a shuttle-type or triangular pattern with ballast return voyages, the majority of dry bulk operations require flexibility to position ships in accordance with changing needs of the cargo interests. Thus, bulk shipping is generally related to specific commodities rather than to particular trade routes. The need to respond rapidly and in a flexible manner to changing market conditions and requirements has led to the pooling of tonnage by a number of shipowners. Two types of pools are generally distinguished: (i) cargo space pools in which individual owners delegate the marketing functions to the pool but keep full control of the operations, and (ii) operational pools mainly designed to reduce costs by sharing administrative and management functions (fixing ships, purchase of supplies, repairs and maintenance). Shipowners and operators from a number of developing countries already participate in such pools to a considerable extent and such involvement may be expected to increase during the next decade.

16. The markets for dry bulk commodities are generally strongly dominated by importers. Buyers are usually in control of the shipping movements as a high proportion of bulk commodity contracts are made on an FOB basis. The buyers are basically interested in securing supplies in accordance with their requirements which, in some cases, have entailed an involvement in ocean shipping.

17. The age profile of vessels in the dry bulk trades is also relatively high. A large proportion of ships will therefore need to be replaced in the not too distant future. However, worldwide shipyard capacity has dropped in recent years. It may therefore be expected that newbuilding prices will escalate, with inevitable repercussions on financing conditions (which are likely to become more severe), as well as on freight and charter rates which will also increase.

18. The largest proportion of bulk carriers is in the "handy-size" (20-40,000 dwt) and Panamax (up to 65,000 dwt) size range. Over a large range of ports these carry a wide variety of cargoes such as iron ore, coal, grain, phosphates, fertilizers, animal foodstuffs, scrap metal, timber and many other "minor bulks" such as cement, paper pulp, etc. In view of their versatility, this class of vessel - which can pass through the Panama and Suez canals and access a very wide range of ports - will no doubt continue to carry a major part of the dry bulk trades.

19. Large and ultra-large dry bulk carriers (generally around 200,000 dwt but up to over 300,000 dwt) are employed on certain regular long-distance routes, transporting iron ore or coal between specific ports. Their employment permits the realization of substantial economies of scale. It may be noted that extensive dredging of the Suez Canal now being undertaken will permit very large bulk carriers to pass through it in fully loaded condition, which is likely to increase demand for such vessels. A variety of combination carriers - which can alternate between dry and liquid bulk cargoes - continue to be employed but this type of tonnage is not likely to increase in view of higher construction costs.

20. Given the importance of bulk transport in their trades, developing countries may reconsider their active involvement in this type of transport. In fact, over the recent past, the aspirations of developing countries in shipping have often been considered as synonymous with an engagement in liner shipping, thus neglecting the potential benefits of an active participation in bulk trades. Based on certain observations, it might be expected that developing

countries' involvement should be on a rather selective basis, both regionally and structurally. With regard to the latter, it would appear that large-scale involvement in the carriage of major bulks in mainstream trades might not be realistic. On the other hand, short-sea trades based on relatively small and flexible tonnage could still provide for interesting investment and employment opportunities for developing countries' operators.

C. Liner shipping and multimodal transport

21. As has been mentioned above [8/] globalization of industrial production is increasingly characterizing the world economy. The concept of globalization has not only affected maritime transport, but has conversely also been decisively shaped by developments in maritime transport. Globalization in the widest sense has dramatically changed the demand for transport and related services and has forced all transportation companies to adapt the services rendered to the requirements of the trading community. At the same time, important technological developments in maritime transport created the pre-condition for the expansion of world trade based on an intensified international division of labour. An example of such development may be seen in the rapid growth of trade in dry bulk commodities in the 1960s and 1970s combined with similarly important changes in trade and production patterns. Reductions in bulk shipping costs based on the exploitation of economies of scale in transport have helped to open up geographically distant markets and thus to reduce, if not eliminate, the locational linkages between the production and processing of raw materials.

22. What may have started with the process of delinking the exploration of raw materials and their downstream processing has turned into a global development in the production and marketing of manufactured products. Today, for instance, a product sold under an American brand name in the United States may have been designed in Europe and assembled in the Far East from components produced all over the world. The aim of such globalization strategies is to systematically take advantage of labour cost and productivity differentials all over the world, and it is facilitated by developments in transport technology and organization that are reflected in such concepts as "multimodal transport", "physical distribution" and "logistics" which aim at optimizing transport flows and distribution processes while reducing inventories. For transport operators to be able to provide such services, they must work in close partnership with the customer, i.e. the shipper, and must maintain control over the various subsystems which make up the total distribution system.

1. Technological changes in liner shipping

23. Over the past 20 years world shipping has undergone significant technological and organizational changes. Unlike previous developments, the implications of these were not confined to the shipping industry but equally affected other modes of transport and transfer points, i.e. ports and inland terminals. Furthermore, developments in shipping technology have been observed in all shipping markets, albeit at varying degrees. In the liquid and dry bulk trades it has primarily been one of realizing economies of scale through larger-sized and specialized transport units while the changes in the liner shipping market go beyond this factor, equally involving changes in transport concepts towards those of multimodalism and transport logistics.

24. The evolution of more efficient transport systems originated in trades between developed countries. It was only with a time-lag of some 10 to 15 years that these changes were also introduced in developing countries' trades, based on the necessity to reduce freight costs and to meet the requirements of physical distribution concepts applied by trading interests in developed countries.

25. The basic technological innovation that drastically changed the face of liner shipping was containerization. Conceived in the 1960s as a means of combatting ever-increasing port costs, particularly in the United States of America, containerization definitely established itself in the 1970s as the predominant form of unitization of break bulk cargoes, proving its general superiority and higher cost-saving potential over intermediate forms of unitization, such as palletization, pre-slinging, etc. Containerization was at the root of a number of consequential changes, refining transport technology and adapting the organization of liner shipping to the requirements of container transport.

26. Since the introduction of containerization on a large scale, vessel sizes have increased dramatically, reflecting the desire of operators to reduce costs through economies of scale. Particularly the second half of the 1980s saw unprecedented increases in vessel size. Thus, in 1985 only around 10 per cent of the world container-ship capacity was provided by vessels of 2,500 TEU or more. In 1990 this share was already up to 40 per cent of the existing fleet

and even 60 per cent of the tonnage on order. In terms of number of ships, there were 221 units of an average capacity of 3,000 TEU in service in November 1990 and 61 units of an average capacity of 3,300 TEU on order. [9/]

27. The importance of this development is even clearer when considering individual vessel sizes. A continuous increase in the size of the largest vessels was observed up to the mid-1980s, culminating in the introduction by United States lines of vessels of a capacity of 4,400 TEU. This type of vessel of the "econo-ship" design was the result of consequent endeavours to reduce costs per slot/mile, limiting its size to Panamax dimensions, a necessity imposed by the anticipated employment pattern of the ships. Other carriers followed suit only towards the end of the 1980s, based on two major developments, namely:

- improvements in ship design which allowed for the maintenance of more competitive sailing speeds. Thus newbuildings in the 4,000+ TEU size range recently commissioned or on order by such owners as APL, CGM, Hapag-Lloyd, Maersk, MISC, etc. are all reported to provide for a service speed of between 23 and 24.5 knots as compared to 18.5 knots of the US Lines "econo-ships", and;

- reconsideration of the need to maintain Panamax size limits for purposes of operational flexibility. The decision by APL to sacrifice this flexibility for operating economies of scale has also induced other operators to take a fresh look at the Panamax constraint, even when they are - unlike APL - global operators. Consequently, in early 1992 CGM ("Normandie", 4,419 TEU) and MISC ("Bunga Pelangi", 4,469 TEU) put post-Panamax ships in service.

28. Clearly this decision to opt for economies of scale at the expense of operating flexibility could have considerable implications for future developments in ships size. The removal of physical constraints could make the emergence of 5,000 TEU or even 6,000 TEU ships a real possibility in the years to come. Whether this actually happens will depend on the ability of individual trades to sustain such vessels and consequently, on the operators ability to market the slots thus made available. Given the excess capacities already prevailing in the trades that might accommodate such ships, it may be questionable whether vessels of such sizes enter service in the years to come. It may thus be assumed that no revolutionary changes are likely to take place in the near future with regard to carrying technology and ship sizes. There will probably be an evolutionary process of technological "refinements" based on the ever-increasing need of shipping companies to reduce costs.

29. Employment of these large container ships has been almost exclusively in the major East-West trade routes. Consequently, the direct impact on trades of developing countries has been limited to those of the Far East and South-East Asia. Developments on the North-South trade routes have, up to now, not been quite as spectacular, but nevertheless important. Thus trades, which up to the early 1980s were still characterized by conventional break bulk services are today largely containerized, based on commercial and operational necessities of developed countries' carriers. Thus, for instance, in trades between Europe and West Africa as well as East Africa, European owners have largely switched to container operations (while, however, maintaining residual break-bulk services). Today, SDV (SCAC Delmas-Vieljeux) is employing vessels of about 1,650 TEU in the West African trade and Beacon ships of 1,350 TEU in the East African trade, while owners in the subregion concerned continue to provide break bulk or hybrid services (to the extent that they still operate any tonnage at all). In the Europe-South America trade, the Eurosal consortium is operating vessels of 2,220 TEU with the participation of South American carriers. One of the ships in the Eurosal service is under charter by Transportes Navieras Ecuatorianos, which in turn charters out slots to CNP of Peru and Empremar of Chile. This operation, containing elements of both North-South and South-South cooperation, could provide valuable insights into possible strategies for developing countries' carriers to reduce the existing technology gap.

30. Another revolutionary process that has characterized container shipping and multimodal transport may be observed in the fields of information systems and technology and satellite communication. Sophisticated computer-based management and operating information systems, as well as electronic data interchange (EDI) provide for efficient cost control, optimum use of equipment and a new quality in customer relations. Some of the new support services include satellite transfer of documents, downloading of manifests directly onto Customs' computers; dial-in checking of status of shippers' goods; computer tracing of containers and chassis, again without human intervention; direct shipper/carrier/consignee computer linkage carefully tuned to guarantee "just-in-time" deliveries. So far only an extremely limited number of transport operators from developing countries can offer any of these services, and it is quite uncertain whether more companies - unaided - will be able to do so in the future.

31. Shipboard automation and advances in the development of navigational equipment and aids have been important tools to further capital/labour substitution and to meet ever-increasing labour cost and shortage. Today, typical crew sizes of a modern third or fourth generation container ship ranges from about 15 to 18. Further large-scale reductions in crew size might be technically possible, but it appears doubtful whether it will actually happen. The path to follow might rather lie in the qualitative upgrading of crews enabling the "concept of quality assurance to be taken to sea". [10]

32. The relative reduction of crew cost of developed countries' operators has a direct bearing on the economic rationale of developing countries' engagement in shipping. During the days of labour-intensive break bulk operations, developing countries could claim a comparative advantage in shipping, based on a sufficiently trained low-cost labour force. This advantage has eroded over time. Excessive manning requirements - both with regard to crew size and number of crews per ship - for relatively unproductive ships have in many cases shed considerable doubts on the continued general validity of this argument.

2. Diversification of liner shipping into multimodal transport services

33. The basic objective of multimodal transport based on containerization is to facilitate the movement of goods under continuous supervision and responsibility of a single operator - thus relieving shippers of the need to approach modal carriers directly or through intermediaries - and to increase overall transport efficiency by aiming at optimum modal split within the transport process. Thus, unlike traditional transport, it primarily takes account of the needs of the cargo rather than the transport mode by ensuring an integrated transport process between the consignor and consignee. This latter aspect may be considered as the most important and overriding single element of the concept. Other effects, such as those on the carriers, transport modes or points of transfer, be they of a commercial, organizational or physical nature can ultimately be deduced from this overriding principle.

34. As far as the requirements of the cargo are concerned, there is, except in special cases, no particular affinity to any individual mode or combination thereof. What is important is that goods get to their destination on time and in good condition and in a manner which, through the integrated process of physical distribution, allows the goods to be marketed at the most competitive price. As long as these conditions are met, it matters little by which modes the goods were actually transported. It is the physical concept of containerization which enables these cargo requirements to be satisfied. The intermodality, i.e. the ability of all modes of transport to move containers linked with relatively simple transfer operations, allows for an optimum modal split, making use of the advantages of each mode to the benefit of the cargo.

35. Multimodal transport may also be looked upon as a response to changing transport requirements. Transport no longer constitutes an isolated process of moving goods from point to point but has become an integral part of total production and marketing processes in the context of marketing-logistic concepts. Thus, traditional ways of optimizing transport sub-systems in an isolated manner at the expense of other sub-systems - even if unintended - have been abandoned and replaced by an integrated approach to problem-solving aimed at total systems optimization. Such logistics concepts have proven to be an indispensable means of reducing transport, storage, packing and related costs as well as of improving the quality of delivered goods with an apparent impact on the performance and competitiveness of the companies concerned.

36. The development of such marketing-logistics concepts was initiated by cargo interests. In contrast, the transport industry tended to maintain the relatively conservative approach of restricting its services to pure unimodal movements (or to handling operations) and started only in the early 1970s to offer on a larger scale total distribution services geared to the interests of the cargo. Thus it has been a rather recent development that not only unimodal carriers, but also cargo handling, warehousing, etc. companies as well as freight forwarders diversified into total distribution services and became multimodal transport operators (MTOs). This diversification, however, was not only a response to changing market requirements but equally reflected the necessity to optimize the employment patterns of new capital-intensive transport equipment acquired by shipping companies.

37. The strategies adopted by the shipping companies were, however, by no means uniform. The general point of departure was the realization that port-to-port container transport had become a commodity service, with resulting pressure on freight rates forcing liner companies to cut costs to an absolute minimum. Strategic responses to this challenge ranged from the maintenance of a port-to-port approach aiming at attaining large transport volumes on a

low-price basis, on the one side, to an outright direct involvement in land transport operations aiming at providing a quality logistics service, on the other extreme.

38. The decision for a shipping company to invest in land-side operations is not an easy one, given the fundamental differences between shipping and inland transport. Shipping is a highly capital-intensive activity with large fixed cost elements while land transport and distribution services are essentially labour-intensive services, as can be seen from the cost structures of freight forwarders. Nevertheless, a growing number of liner shipping companies, under the pressure of their customers' logistics requirements and their desire to provide value-added services have diversified into multimodal transport operations, particularly through acquisition of trucking and freight-forwarding companies. Others have taken a somewhat more cautious approach. In order to maintain flexibility in responding to the differing needs of their customers, they prefer to buy in a range of inland services from reliable suppliers on a sub-contracting basis.

39. In the case of liner operators extending into MT operations, sea transport generally remains the dominant sub-system, largely owing to the much higher investment requirements (to the extent that owned tonnage is employed) as compared to those of inland transport, the latter very often being subcontracted in any case. Consequently, MT is often considered as a way of ensuring a return on the shipping investment through tighter cost control as well as by improvement of potential revenues. This can basically be achieved by:

- improved control over container movements (optimization of inland container movements),
- control over inland transport links,
- realization of economies of scale in inland transport,
- concentration of cargo flows through a limited number of ports, i.e. optimization of vessel routing,
- offer of complex distribution services,
- increased flexibility in the establishment of tariffs.

40. Despite these advantages, the move inland is not an easy one and it remains to be seen whether shipping lines are uniquely well placed to take advantage of this new market for high-quality international distribution services. "Freight forwarders and NVOCCs are also well aware of the new opportunities that are emerging, and they have an established expertise in tailoring distribution packages that few lines can emulate. The rather contemptuous attitude that shipping lines have typically displayed towards companies operating in this sphere should not blind us to the fact that many forwarding companies are sophisticated, innovative operators that may well play the leading role in the coming logistics revolution." [11/]

3. Concentration processes

41. On a global scale, liner transport is a relatively fragmented industry. "The biggest regular maritime transport company today represents less than 5 per cent of the total market. ... It is necessary to add together the traffic of the world's 20 biggest lines to cover 37 or 38 per cent of the world market. There are not many international industrial fields where the size of the individual units is so small." [12/] While this statement reflects the global situation, things may be quite different in individual trades, particularly in North-South trades. The Europe-West Africa trade may serve as one example here, where recent action by the Commission of the European Communities points at a considerable degree of monopolization of the trade. [13/]

42. However, also on the global scale, C. Abraham states that "It is probable that this situation will not last. An English economist claimed back in 1987 that in the service sector, 'If you are not number one, two or three in the world, there is a strong possibility that you will need to merge with or be absorbed by someone else.' And another economist added that at least one of the three would be American, the second Japanese and the third perhaps European." [14/]

43. The process of concentration or, in some cases of internal growth, has already led to the development of what is now termed "mega carriers". The size of the companies and the sophistication of services rendered by nature limits the number of such "mega carriers" in the market such that it seems unlikely that the number of companies offering global shipping and multimodal transport services will increase notably in the coming decade. Mega carriers, as they now exist are all shipping lines that have branched into multimodal transport operations and are based in developed countries, with such notable exceptions as Evergreen and, possibly, Yangming.

44. The mega carriers have their main trades on the all-important east-west routes. On these they compete with transport operators from developing countries only to a limited extent. Some might thus attempt to dismiss the technological developments referred to above as not very important to transport operators from developing countries. Nothing would be further from the truth. Once east-west trades have reached a certain level of sophistication, saturation pressure will invariably commence towards similar development procedures in trades that directly touch developing countries. For some countries, particular those on the east-west links, e.g. India, Malaysia and Indonesia, etc., this of course is already happening. Shipping lines and MTOs operating in these trades will then have to compete with carriers offering extremely cost-competitive services.

4. Transhipment

45. The desire of carriers to integrate and control transport operations from beginning to end and, at the same time, to seek greater efficiency and thus a better return on investments has fostered the developments of transhipment on the scale observable today. This development has taken place under the pressure brought to bear upstream and downstream by the market forces of the products carried, which has grown in a setting of keen competition that has pushed back boundaries, integrated trade, reduced costs and led to better services being rendered.

46. So as to be able to better adjust to market requirements, the big shipowners have brought into service third-generation and fourth-generation container ships which, through economies-of-scale, reduce the unit cost per container carried. The efficiency of these container ships is obviously dependent on the load factors attainable on deep-sea routes; they are increasingly ill-suited to the traditional practice whereby the ships themselves have to pick up or set down cargo at every port in the range of ports they serve.

47. This factor led to the idea of concentrating calls on a limited number of main ports, or even one such port and of using those hub ports as the nodes of intersection of a genuine network of main and secondary sea routes, so that cargoes might be combined or "massed", ships better filled and the number of ports served from each port in the network increased.

48. Present day trends in containerized sea transport thus point away from the traditional idea of the direct sea route port-to-port (and often of the power of the Conference that controls it), in which the ship, the cargo and the ports are closely associated, to a distribution over a network comparable to road networks comprising main trunk roads and an associated system of secondary roads, and also with the new patterns of air transport - the hub and spokes. The container has become the direct transport device which has enabled cargo to be channelled in an optimum manner through a meshed network built up around a number of junctions or hub ports, be this a sea route using coasters or feeders or overland by road, rail, inland waterways or even air.

49. Econometric calculations of the optimum size for a container vessel have had a definite influence on the organization of this new type of shipping service. The optimal size is the result of a compromise between economies of scale resulting in lower cost per slot-mile, the cost of keeping the ship berthed in port and the marketability of the slots available. It thus depends, among other factors, on the length of the voyage and the characteristics of the ports. Such economic considerations have produced a definite trend towards increased ship size, which presents the problem of how to operate the ships intensively enough to keep them competitive and sufficiently full to be profitable. A few companies operate such ships singly, but the question of economies of scale and trade requirements with regard to frequency of service (which is nowadays required at least once a week) have led shipowners to form consortia on a number of trades. This makes it easier for them to assemble the large quantities of goods required for frequent and competitive sailings and sometimes even enables them to increase the number of direct calls.

50. Transhipment clearly has a favourable effect on the cost of operating the deep-sea vessel and on transit time between transhipment ports, as it limits the calls of the vessel and increases the density of traffic, which means a reduction in port time. It nevertheless means additional handling, the cost of which is a vital consideration in weighing the case for and against transhipment.

51. One of the most immediate and striking implications of transhipment is the specialization of ports. Thus, there are: dedicated hub ports, located either at the intersections of main sea routes or at one end of such routes at a place where the flow of container traffic is to be split up to serve the ports of the neighbouring area; hub and load-centre ports, which in addition to the above, also carry a substantial traffic of their own bound for or from their hinterland; direct-call ports, which are those still being served directly by motherships; and finally, feedered ports, that is, those

ports linked to the main trade routes by feeder vessels which connect them with the hub and load-centre ports. In all cases, it is obvious that any port strategy no longer depends solely on national considerations but has an international scale.

52. Further, in the context of integrated transport systems, ports can no longer be considered as terminal points of a transport mode but rather as forming an essential link in a transport chain from consignor to consignee. In order to fulfil such a role, many ports have developed into service centres. The underlying concept of these services centres is to upgrade port activities from pure cargo handling at terminal points to offering a comprehensive transport-service package. This concept implies that the port offers services indispensable for the optimization of the whole transport chain, including storage and distribution and builds up from the more conventional activities of stuffing and stripping containers. The offer of such services in a number of ports may have gone somewhat unnoticed as they, unlike the earlier introduction of containerization and similar concepts, did not change the outward appearance of the port. Nevertheless, these changes in the service structure or even in the understanding of the role of a port are of vital importance not only for the competitive position of a port but equally for the industry served by the port.

53. The new services may be summarized as providing essential logistics support to the exporting and importing industries; more specifically they involve information/documentation and distribution/storage services. The general support offered by the port addresses itself to all port customers and can entail such services as signaling the arrival of goods to shippers and shipping companies, scheduling goods prior to the arrival of a vessel, receiving and monitoring stock, making quantity and quality control reports, possible batching of individual consignments, issuing stock dispatch reports, dispatch statistics, delivery notes, customs papers, customs accounting, provision of trade statistics, etc.

54. As far as the physical movement and storage of cargo is concerned, modern service-oriented ports are increasingly acting as distribution centres both for export and import cargoes. Branching into distributive services has considerable implications for the port, its users - both traders and the various modes of transport - as well as the national economy.

55. The creation of distribution centres is not only addressed to cargo owners, who are the prime beneficiaries of such systems, but has an equally positive impact on the allocation of cargoes to different inland transport modes. The relative ease of handling containers linked with the possibility to consolidate container shipments at the distribution centre offers ideal conditions for a complementary relationship between road, rail and inland waterway transport. A system of this kind involves a cost/quality compromise offering a number of advantages not only to shippers and consignees but also to the national economy. The quality of transport is improved by making use of special unit trains or specialized inland waterway vessels for trunk hauls. The system speeds up transport movements while maintaining other qualities or characteristics typically linked to the more expensive road transport, such as door-to-door transport capability. The port and its distribution centre help to guarantee a minimum number and steady flow of containers to ensure that unit trains or container inland waterway vessels leave at sufficiently frequent intervals, a support without which multimodal transport systems may only have a limited potential. Finally, the establishment of distribution centres has a considerable impact in regional economic development. The new types of services create new employment opportunities for qualified personnel and may put into use previously unused land.

56. This extension of activities also makes it clear that comparisons of port activities by means of global throughput figures are rather meaningless, as they do not give an indication of the actual activities performed. The inclusion of distribution and related services has a considerable impact on the value added by the port and consequently on the income generated. This becomes more important, the less local cargoes are available to the port, i.e. the more there exists a competitive relationship with other ports either in the same country or in the subregion.

57. In developing countries, the concept of ports acting as service centres is only very slowly gaining ground. Apart from a few ports, particularly in South-East Asia and the Far East, ports have tended to remain terminal points, thus making only a limited contribution to the integration of transport processes. Unless such a shift takes place, however, developing countries may be deprived of the benefits of improved transport systems and be left with heavy investments in transport infrastructure and equipment without the anticipated return.

5. Conference structures

58. For more than 100 years liner conferences had provided the organizational framework within which liner shipping developed as a largely self-regulated industry. Despite apparent shortcomings, they were generally recognized as beneficial for trade, both from the point of view of the suppliers and the users of liner shipping. The inherent effects on competition were either tacitly or expressly accepted, with the notable exception of the United States where "open conferences" developed. Regulatory action taken at the national, regional and international levels did not necessarily call into question the existence of conferences, but was rather geared at avoiding abuses to which the system might lend itself to.

59. If the conference system is in dire straits today, it is not because of regulatory action enforcing competition legislation but rather because of the inability of the system to renew itself or adapt to changing transport requirements. It is interesting to note that both shippers and shipowners are increasingly voicing criticism, if not always for the same reasons. Yet, there appears to be a certain level of agreement that conferences or other cooperative structures will have to be more market-oriented, particularly with regard to pricing of services. Complex and complicated tariffs to which nobody adheres are generally the focus of criticism and they should eventually become a thing of the past. Similarly, the principle of equal treatment of shippers is called into question, particularly as it has not been effectively applied.

60. Simplified tariffs should reflect costs and the level of service provided by the carriers. In such a situation there may be little scope for traditional conference tariffs differentiated by products and rated on the basis of such notions as "what the traffic can bear", cross-subsidization and preferential rates. In this context, K.H. Sager has remarked: "Rates are almost 'freight all kind'. The 'Mega Carriers' with very fast ships and an excellent network may be able to charge a little more than the average line but the difference between high and low valued goods may be $US 1,700 against $US 1,300 per box and not $US 100 against $US 30 per freight ton as in the conventional days. It is a 'give-away' to shippers because today's low ocean transportation prices very rarely ever determine whether the goods will move or not." [15/]

61. In view of the mounting dissatisfaction, what could be the future of the conference system? While it might be premature to dismiss the system completely, there appears to be a certain measure of agreement between major carriers and large shippers that conferences, at least those covering the major trade routes, require more flexibility with regard to contractual relations with shippers, pricing of services, types of services offered and streamlining of decision-making procedures. [16/] Some proposals go further and include the establishment of parallel conferences in a given trade. [17/]

62. In this context, there is an important issue for a number of developing countries' carriers who have so far operated under the protective umbrella of traditional type conferences. Different possible options will have to be developed for these - typically break bulk - carriers to find market niches available to them in a new conference setting, outside any conference-type cooperative organization, or possibly in the context of more innovative approaches, such as the parallel conference system just mentioned.

Chapter II

PARTICIPATION BY DEVELOPING COUNTRIES IN WORLD SHIPPING

A. Quantitative assessment

63. The question of merchant fleet development has been for developing countries one of the major policy issues addressed over the last two decades. This question has not been looked at in isolation but as part of a more embracing policy approach that equally considers trade-related issues of maritime transport, in particular the protection of shippers' interest. Consequently, when attempting to evaluate the degree of success of fleet development policies, the latter objective should be borne in mind as a corollary.

64. Major decisions taken and policy objectives agreed at the international level on the issue of merchant fleet development are reflected in numerous resolutions and decisions of the Committee on Shipping of UNCTAD, the various UNCTAD conferences, in particular, UNCTAD V and UNCTAD VI, international agreements negotiated under the auspices of UNCTAD and General Assembly resolutions. In the following, an attempt has been made to isolate and analyse the development of the policy objective of increased participation by developing countries in world shipping through resolutions and decisions adopted by the competent United Nations organs. The corresponding decisions on trade-related aspects of shipping, which were generally taken in parallel to underline the close linkage between the two policy objectives, are likewise treated.

65. The achievements of developing countries as a group in terms of increasing participation in world shipping are reflected in table 3. Fleet data contained in this table reveal that both the objectives of the Second Development Decade (i.e. 10 per cent of the world tonnage) and of the Third Development Decade (i.e. 20 per cent of world tonnage) could be reached. In fact, in 1980 developing countries owned exactly 10 per cent of the world fleet and in 1990 raised their participation to 21.2 per cent. Accepting the validity of the original objectives, *prima facie* evidence would thus suggest a satisfactory, if not optimum, level of implementation of internationally agreed policies was being reached.

66. While the targets of the two United Nations Development Decades were met for developing countries as a group, table 4 reveals that there were, nonetheless, considerable structural deficiencies. Such shortcomings may be observed both with regard to the fleet structure as well as the regional distribution of tonnage. Problems of fleet structure are particularly apparent in the general cargo sector. The share of developing countries in conventional general cargo tonnage increased from 17.6 per cent in 1980 to 26.2 per cent of the world tonnage in 1990. This represents not only a relative increase based on the fact that world general cargo tonnage had declined from 116 million dwt to 102 million dwt over the same period of time, but also an absolute increase from 20.7 million dwt to 26.9 million dwt. It is particularly interesting to note that developed market-economy countries reduced their engagement in general cargo tonnage from 50 million dwt to 23 million dwt between 1980 and 1990.

67. Given the relatively low productivity of general cargo tonnage as compared to container tonnage and the particularly disadvantageous age structure of the developing countries' general cargo fleet, [18] there appears to be considerable *prima facie* evidence that developing countries have to a large extent invested in obsolete tonnage and have equally failed to undertake the necessary reinvestment to replace economically redundant vessels. Bearing in mind the technological and organizational changes in liner shipping, it is evident that the lack of adaptation to new structures will have considerable repercussions on present and future competitiveness of the fleets of most developing countries.

68. The potential lack of competitiveness on deep-sea routes is also underlined by the relatively low participation in container tonnage, which is reflected both in a below-average share in world container tonnage as well as in the share of container tonnage in developing countries' total liner tonnage. Thus, in 1990 only 13 per cent of total developing countries' liner tonnage was container tonnage, while in developed countries this share was 34 per cent. Additionally, the age structure of general cargo ships was more advantageous than that of developing countries.

Table 3

Percentage shares of world tonnage by type of vessel and country groups as at 1 July 1980 and 1990
(In terms of dwt)

Country group	Year	Total dwt		Oil tankers	Bulk carriers	General cargo ships	Container ships	Other ships
		Millions of dwt	Percentage of world total	Percentage share by vessel type				
World total	1980	682.8	100	49.7	27.2	17.0	1.6	4.5
	1990	658.4	100	37.4	35.6	15.6	3.9	7.5
of which:				Percentage share by group of countries				
Developed market-economy countries	1980	350.1	51.3	52.5	52.7	43.4	74.3	50.4
	1990	219.0	33.3	37.3	29.5	23.1	46.5	45.2
Open-registry countries	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1990	224.6	34.1	41.6	33.2	26.2	21.1	24.2
Developing countries	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1990	139.7	21.2	16.3	25.6	26.2	16.0	17.4
of which in:								
Africa	1980	7.1	1.1	1.1	0.1	2.3	..	2.1
	1990	7.3	1.1	1.0	0.5	2.3	0.2	2.9
America	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1990	25.5	3.9	3.0	3.8	6.2	1.4	4.7
Asia	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1990	89.5	13.6	10.7	17.6	13.7	13.5	9.1

Source: UNCTAD, Review of Maritime Transport 1990 (TD/B/C.4/340), Sales No. E.91.II.D.16, New York, 1991.

69. From the data contained in table 4, it becomes apparent that any meaningful statement on the participation by developing countries as a group in world shipping requires careful qualification with regard to regional peculiarities and the consequent implications for a policy calling for a more "equitable" participation in world shipping. The increase in tonnage from 68 million dwt in 1980 to 140 million dwt in 1990 was practically exclusively based on tonnage increases in a number of Asian and European developing countries. While the decade of the 1970s still saw considerable progress in tonnage ownership in developing countries of Africa (7.2 million dwt in 1980 as compared to 1.1 million dwt in 1970) and of America (21.8 million dwt in 1980 as compared to 8.7 million dwt in 1970), [19] the decade of the 1980s was basically one of stagnation in these regions. Additionally, the structural problems referred to above [20] were even more pronounced in these regions than in the group of developing countries as a whole, or in developing countries of Asia.

Table 4

Structural changes in world shipping by regions 1980-1990
(million dwt and percentage shares)

	1980		1990	
	Million dwt	Percentage of fleet	Million dwt	Percentage of fleet
World				
Total	682.8	100.0	658.4	100.0
of which:				
Oil tankers	339.3	49.7	245.9	37.3
Bulk carriers	185.7	27.2	234.7	35.6
General cargo	115.8	17.0	102.7	15.6
Container ships	11.2	1.6	26.0	4.0
Developed market-economy countries				
Total	350.1	100.0	219.0	100.0
of which:				
Oil tankers	178.1	50.9	91.7	41.9
Bulk carriers	97.9	28.0	69.3	31.6
General cargo	50.3	14.4	23.8	10.9
Container ships	8.4	2.4	12.1	5.5
Open registries				
Total	212.5	100.0	224.6	100.0
of which:				
Oil tankers	122.9	57.8	102.4	45.6
Bulk carriers	58.8	27.7	77.9	34.7
General cargo	24.1	11.3	26.9	12.0
Container ships	1.5	0.7	5.5	2.4
Developing countries				
Total	68.4	100.0	139.7	100.0
of which:				
Oil tankers	26.0	38.0	40.1	28.7
Bulk carriers	17.1	25.0	60.0	42.9
General cargo	20.7	30.3	26.9	19.3
Container ships	0.9	1.3	4.1	2.9
Developing countries of Africa				
Total	7.2	100.0	7.3	100.0
of which:				
Oil tankers	3.6	50.0	2.4	32.9
Bulk carriers	0.3	4.2	1.1	15.1
General cargo	2.7	37.2	2.3	31.5
Container ships	0	0.0	0.04	0.5
Developing countries of America				
Total	21.8	100.0	25.5	100.0
of which:				
Oil tankers	7.9	36.2	7.5	29.4
Bulk carriers	6.2	28.4	9.0	35.3
General cargo	6.5	29.8	6.3	24.7
Container ships	0.04	0.2	0.4	1.6
Developing countries of Asia				
Total	39.1	100.0	89.5	100.0
of which:				
Oil tankers	14.5	37.1	26.3	29.4
Bulk carriers	10.5	26.9	41.2	46.0
General cargo	11.4	29.2	14.0	15.6
Container ships	0.8	2.0	3.5	3.9

Source: Data based on UNCTAD, Reviews of Maritime Transport, 1980 and 1990, (TD/B/C.4/222 and TD/B/C.4/340).

70. The slow pace or even lack of progress is again reflected in the participation of these two regions in container tonnage. Thus, in 1990, all developing countries of Africa taken together owned container tonnage with a carrying capacity of 1,810 TEU, which is considerably less than the carrying capacity of a single third-generation container ship. The TEU capacity of container vessels owned by developing countries in America, while being somewhat more impressive than that owned in Africa, is equally negligible at 23,000 TEU or 1.5 per cent of world capacity. On the other hand, six developing countries of Asia rank among the 20 most important maritime countries of the world, [21] while 10 figure among the 35 most important ones. [22] Similarly, with regard to their involvement in modern liner shipping, their ratio of container tonnage to total liner tonnage, while not as advantageous as that of developed countries (33.7 per cent) was considerably more favourable at 20 per cent than that of developing countries as a group (13 per cent).

B. Qualitative assessment

71. The above analysis, taken together with the structural changes affecting shipping at the global level, [23] raises a number of questions concerning the degree of attainment and, even more important, of the continued validity of shipping policy objectives formulated in the 1970s and 1980s concerning participation by developing countries. As it has been stated before, the tonnage targets set in the United Nations Development Decades were met both in 1980 and in 1990. [24] Quite apart from the apparent regional imbalances, however, it is questionable whether developing countries actually provided a corresponding share of the transport services, as the tonnage target cannot be understood as an ultimate target limited to the physical ownership of tonnage itself. If this were the case, it would be a measure of irrelevance, as the tonnage owned must, of course, be gainfully employable and employed. Even though no pertinent data are available, the tonnage structure of developing countries' fleets as well as the experience of a number of individual countries and their shipping companies suggest that this modified target was not reached, neither in the second nor in the third decade.

72. In liner shipping, the concept of ownership itself is a relatively outdated one, reflecting conventional general cargo transport. What is required today, rather than ownership of the vessel, is commercial control over the services offered. This is particularly relevant for developing countries as the financial requirements for the acquisition of large, sophisticated vessels employed in the deep sea trades cause such tonnage to be beyond the reach of most developing countries and their shipping companies. Equally, most shipping companies from developing countries would not be in a position to provide for the back-up organization necessary to employ such tonnage successfully.

73. However, it must be stated that, in many cases, shipping companies from developing countries, rather than searching for new, innovative forms of participation in advanced forms of shipping, have clung to the philosophy of individual ownership of the low or medium technology ships prevailing during the 1970s. This philosophy of adapted technology that was the basis for large-scale investment in multipurpose type vessels may have been appropriate in the 1970s to reduce the qualitative risk of investment and to take advantage of low labour cost. Today, however, productivity gains in container shipping and the integration of land and sea transport modes make it increasingly difficult, if not impossible for operators of general cargo tonnage to compete successfully in deep sea trades. Additionally, the importance of the labour cost advantage, that initially made developing countries invest in relatively labour-intensive tonnage has eroded over time. Technological advances resulting in drastic manning reductions, shipbuilding overcapacities and ease of access to finance that characterized the second half of the 1970s and the 1980s have led to a considerable increase in the productivity of capital employed and thus favoured owners of capital-intensive vessels.

74. For developing countries to maintain or, in most cases, to gain a significant position as producers of maritime transport services, where ownership and flag are no longer central elements, it is crucial that competitive and exportable services be produced that can be offered in an increasingly international market. In order to arrive at such a situation, it is essential that another policy principle also be critically examined, namely the linkage between trade generation and participation in shipping. While this linkage could possibly be useful in evaluating the level of participation of developing countries as a group in shipping, the attempt of individual countries to implement such linkage at the national level has proven problematic. It has resulted in a "bilateralization" of maritime transport, particularly in African and Latin American countries. As a consequence, market segments available to carriers of the developing countries concerned have been limited to their national trades. It is obvious that competition can hardly be deemed to be on equal terms if the national carrier is confined to such a narrow cargo base.

75. When looking at the development of individual national fleets, it appears that the issue of "bilateralization", as particularly reflected in stringent cargo-reservation measures, is one of the keys to determining the relative success or failure of national shipping policies, in general, and the ability of developing countries' national carriers to provide competitive services, in particular. There is only a limited number of developing countries with a sufficiently wide cargo base to ensure commercially-sound shipping services while at the same time fulfilling the demand of shippers for the provision of "adequate" shipping services. It is the countries which used their home trades as a cargo base while at the same time following a consistent policy of promotion of the export of shipping services and the development of support services which number today among the leading maritime nations. Additionally, certain countries at a relatively early stage diversified into service-oriented economies that included the provision of shipping and related services. While for the latter countries, the existence of fairly liberal shipping markets was a necessity and a motor for growth, the former category has rather taken a split approach of limiting access to home markets while benefiting from existing export possibilities. Such unilateral action is viewed increasingly critically by trading partners and may ultimately be unacceptable.

76. Another issue of principle that should be borne in mind when evaluating the bleak state of some of the shipping companies of developing countries concerns ownership of the companies. While this is generally a function of economic policies pursued, in most developing countries shipping is considered a strategic industry and ownership of the companies rests with the State. Although public ownership need not present a problem as such, the experience of a number of countries would indicate that there are consequent shortcomings at the managerial level as well as in the attitude of the single shareholder in respect of the financial performance of the company. In order to overcome these problems, a programme of commercialization should be set in motion. It should be accompanied by at least a partial privatization of national shipping companies. [25/] While commercialization best describes the changes necessary, the participation of the private sector and its consequent involvement in the financing and management of the companies would provide for a controlling mechanism for the effective implementation of a more commercial approach to shipping.

77. Several developing countries already have formulated and implemented new shipping policies, thus responding to the trend towards a greater degree of liberalization prevailing at the multilateral level. While there appears to be a general recognition of the need for a change of national policies, the pace of adaptation varies considerably from country to country. Long-established, encrusted institutional structures existing in a number of countries exercise a retarding effect on the speed of formulation and implementation of revised national shipping policies.

Chapter III

THE RELATIONSHIP BETWEEN USERS AND PROVIDERS OF SHIPPING SERVICES

A. The consultation machinery

78. The question of the protection of shippers' interest has been a recurrent issue under discussion by the Committee on Shipping. Resolutions adopted by the Committee dealt primarily with the conference/shipper consultation machinery established by the relevant provisions of the United Nations Convention on a Code of Conduct for Liner Conferences, which was instrumental in institutionalizing consultation processes in many liner trades.

79. Specific issues of protecting the interest of shippers dealt with in the Code include:

- the freedom of choice of shippers among carriers;
- loyalty arrangements;
- the level of freight rates; and
- the consultation machinery.

80. Of these issues, the one of effective consultations has been at the forefront of deliberations of the Committee on Shipping. In fact, the Code establishes the right of shippers' organizations to request consultation with conferences on "matters of common interest". The wording "matters of common interest" has been taken to mean that all decisions of the Conference affecting shippers were subject to consultations. Regarding this aspect, the Code goes beyond established practices. An indicative list of matters which may be subject to consultations is given in article 11 (2) and (3) of the Code. Furthermore, consultations are to be held before final decisions are taken, unless otherwise provided in the Code. Exceptions to the principle of advanced consultations basically relate to the imposition or change in the level of surcharges, where consultations, upon request, may be held as soon as possible thereafter. The lack, or insufficient implementation, of this latter provision has remained a matter of concern to the Committee.

81. In accordance with the philosophy of self-regulation of liner shipping conferences maintained by the Code, only those parties having a commercial interest can fully participate in consultations. Article 11, together with the annex to resolution 1, largely limits the role of Governments in consultations to one of an observer. While Governments do have the right, upon request, to participate fully in the consultations, they are not entitled to play a decision-making role.

82. The introduction of meaningful consultation procedures called for the establishment of an adequate institutional infrastructure devoted to the protection of shippers' interest. In Europe, the concept of shippers' councils, their functions, organization and role in the national maritime sectors was developed in the 1950s and 1960s. In the 1970s and early 1980s this concept was applied to developing countries. This had considerable positive impact in counterbalancing conference power and thus in contributing to the effective protection of the interest of shippers in the countries concerned. Irrespective of these positive aspects, however, the work of a number of shippers' councils has become more problematic over time, both for reasons of national shipping policies pursued and owing to difficulties in reacting to the structural changes that have characterized shipping over the last two decades.

B. Extended requirements for the protection of shippers' interest

83. Shippers' councils were established to deal with conferences and their cartel-like structures and powers. An unprecedented erosion of conference power has taken place in the last two decades, however. Non-conference competition, the introduction of containerization and multimodal transport as well as the formulation and implementation of important national legislation, such as the United States Shipping Act of 1984, have had a lasting impact on the conference system and consequently on shipowner/shipper relationships. While it may be premature for developing countries to dismiss conferences servicing their trade, the indications are that the conference system will probably never be the same as during the era of port-to-port break bulk shipping prevailing until the early 1970s. It is equally clear that shippers' councils must react to these developments if they wish to avoid becoming redundant.

84. The traditional role of shippers' councils in negotiating freight rates with conferences has long been considered as synonymous with the idea of protecting shippers' interests. However, the eroding importance of the conference

system and the continuing pressure of non-conference competition have resulted in a large-scale breakdown of conference rate structures. More and more, shippers are negotiating rates directly with lines, including conference lines. When this occurs, the conference tariff is nothing more than a base for negotiations; it ceases to be a fixed price list. This change has affected mainly container operations, but these are increasingly the dominant operational pattern and developing-country trades will experience, as developed-country trades have already experienced, the speedy relegation of break bulk shipping to all but residual trades. These developments may create difficulties for most developing country shippers, who may feel uncertain of their ability to deal directly with lines without the protection of the conference rate schedule to which all owners and shippers adhere.

85. Additionally, the increasing application of the multimodal concept to transport affects the role and functions of shippers' councils. More and more often, a single door-to-door rate is quoted to the consignor, so that the shipper has nothing to do with the individual transport operators of the different modes used. The transport organizer, i.e. the multimodal transport operator (MTO) may not even be a shipping line, let alone a conference carrier. A non-vessel operating MTO (NVO-MTO) does not necessarily ship by a conference line servicing the trade directly, nor even by a non-conference carrier serving the same direct route. The fact that he can make use of different ports - which because of a relatively clear delimitation of hinterland zones never directly competed during the days of break-bulk transport and the increasing use of landbridges - has opened a new dimension of competition beyond that of traditional conference/non-conference competition. An example may illustrate this. A container to be shipped from Central Europe to the Far East could:

- go on the all-water route from North-western Europe directly to the Far East;
- be trucked to a Mediterranean port for sea shipment;
- use the all water route westbound on a round-the-world service;
- use the Transiberian landbridge;
- use combined sea/land services via North America.

In addition, various transhipment services exist, depending on the actual ports of loading and discharge.

86. Obviously the tasks of a modern and effective shippers' council in a developing country have to go beyond those traditionally performed. Consultations and negotiations with conferences remain important, but any council restricting its services to such questions may lose its *raison d'être* sooner or later. Shippers in developing countries, particularly small and medium-sized ones have only to a lesser extent than their counterparts in developed countries benefited from the technological changes and consequent increases in competition in liner shipping. The traditional conference system had provided them with relative security in terms of transport costs being a fixed element in their total cost calculations. Today these cost elements have become more variable and thus a decisive element in determining competitiveness in overseas markets.

87. In such a situation, the comparative disadvantage of a small or medium sized shipper is clear. As he cannot afford to maintain under-utilized shipping departments, he is often not in a position either to organize the transport of his trade or even to judge the soundness of transport proposals received. His negotiating position *vis-à-vis* carriers or freight forwarders is correspondingly weak. This is where direct assistance by the council is essential. It can make sure that the best transport alternatives in terms of price and quality required are being made available to the shipper. This does not imply, however, that the council would take over functions typically fulfilled by commercial transport operators, particularly freight forwarders.

88. In view of the rapid development of multimodal transport, shippers' councils may be expected to extend their activities to include modes of transport other than sea transport as well as transfer operations and ancilliary services. As has been mentioned before, shipping, owing to technological advance and increasing competition, is presently offering high-quality services at relatively low prices. However, while ocean freight rates have, even in real terms, often declined in recent years, the connecting port costs and inland transport rates have not necessarily followed suit. The result is that the portion of sea transport cost in door-to-door rates is declining. Given this development, it is obvious that efforts by shippers' councils to reduce overall transport cost will have to be increasingly aimed at costs that are not directly linked to ocean transport services. The case of tobacco shipments from Malawi to the United Kingdom/North West Continent route may serve as an example here. In 1990, ocean freight rates for Malawi tobacco ex Durban [26] ranged from $US 925 to $US 1,025 per 20-foot container on non-conference lines and US$1,000 to $US 1,025 on conference lines. At the same time, average inland transport rates from Lilongwe to Durban were $US 1,725 per 20-foot container. The reasons for the high inland transport costs are manifold and do,

in this specific example, also relate to the long distance to the sea port. However, evidence suggests that regulatory measures meant to influence market structures by attempting to ensure a desired modal split or a particular level of competition have often not produced the desired results, but have simply led to cost increases unilaterally benefiting the local transport industry.

89. Given the present situation of transport of the foreign trade of developing countries, a shippers' council in these countries should fulfil the following functions:

- assure negotiations with ocean carriers on all matters of concern to shippers;
- provide information to shippers on costs and conditions of transport;
- provide direct assistance to shippers, particularly to small and medium sized ones, regarding the shipment of particular consignments;
- represent the interests of the trading community *vis-à-vis* Governments in their formulation and implementation of shipping and transport policy measures;
- undertake research on a continuing basis into questions of importance for the protection of the interest of transport users, the effective application of relevant transport policy and the economic conditions of using different transport routes and modes.

C. Organizational reform of shippers' councils

90. The functions of a shippers' council elaborated above clearly indicate that the councils are primarily professional organizations and not political ones. Equally, their role and functions are not static. They must react dynamically to changes in shipping, transport and trading patterns.

91. When considering the history of shippers' councils in developing countries over time, two types of councils have emerged. The majority of Latin American and a number of Asian councils were organized as shippers' cooperatives, i.e. as professional organizations. A completely different approach was chosen by practically all African countries when they created shippers' councils in the 1970s and early 1980s. In the latter countries, shippers' councils were created as public institutions, taking up not only negotiating functions with liner conferences, but also being entrusted with implementing the shipping policy decisions of the Governments. At the time of creating the councils there appeared to be a certain logic in this approach. First, in most of the countries concerned, the shippers community was basically comprised of public enterprises, thus creating a public interest in the creation and work of the council. Secondly, Governments felt that the two elements of their shipping policy, i.e. development of a merchant marine and protection of shippers' interest were so closely interrelated that it could be pursued simultaneously by one single agency.

92. Shortcomings to this approach have appeared, however. The need for protection of shippers' interest arises irrespective of the ownership patterns of the exporting and importing industries; it is based on the contractual relationship between users and suppliers of transport services. While, in the case of publicly owned exporting and importing industries, the State may play a leading role in the creation of a shippers' council, it should do so in its quality of owner of the industry concerned rather than as public administration. In entrusting the council with typically administrative functions, it deprives the shippers of an important institution that should clearly defend their specific interests. The defence of shippers' interest would equally include the representation of the shippers' community *vis-à-vis* the Government and the administration, if need be, a task which cannot be accomplished if the council itself is part of that same administration.

93. In a number of countries - and closely linked to the above-mentioned public-service approach to shippers' councils - the councils have been entrusted with functions that would normally be alien to their proper functioning. The example of this which has most often been cited for criticism is implementation of the provisions on participation in trade of the Code of Conduct. Based on often rigid national cargo-sharing or cargo-reservation provisions, these councils manage a priori sharing schemes of conference or liner cargoes which sometimes work to the detriment of the immediate interests of the shippers' community. Mounting criticism by shippers as well as external pressures have highlighted the dilemma of a number of councils. The original approach to shipping policies designed as a seamless whole and adopted by these countries - where both protection of shippers' interest and merchant fleet development were seen as elements assuring control over maritime transport operations to the benefit of the national economy - has not worked. Shippers' councils, and consequently shippers and consumers, were pushed into the role of supporting not only ailing national shipping lines, but also foreign lines, in particular conference lines.

94. The dilemma of the shippers' councils in the countries concerned has further ramifications. Even if the councils unconditionally accepted the necessary separation of the protection of shippers' interest and promotion of the national fleet (or regulation of liner shipping activities), implementation would still be problematic, as may be seen from the difficulties faced by a number of African councils in their approach to restructuring. While, on the one hand, the Governments themselves often lack the necessary administrative infrastructure to assure implementation of policies, rather than entrusting this to the shippers' councils, on the other hand, the councils for their part have not reluctantly taken over these functions, as they assure a large part of their operating budget and have fostered their seemingly uncontrolled growth in a number of countries.

95. The important question now is whether these councils will in future be able to defend effectively the interests of their shipper members, given the increasing complexities of shipping and related transport as well as the level of competition faced by national export goods and commodities in foreign markets. For the answer to be affirmative, restructuring of the councils will be indispensable. Irrespective of the financial and employment consequences, they will have to concentrate on the solution of practical transport problems facing shippers and discard all functions not directly related to that primary objective. In other words, they will have to be a professional rather than policy-implementing institution. The question cannot be whether or not the shippers' councils will continue to exist, but in what form they will exist. Yet, in order to ensure their continued existence, the impetus for the necessary restructuring will have to come from the councils themselves. While Governments may be too over-burdened to undertake this task, they cannot, however, relieve themselves of responsibility for creating the framework in which the councils can successfully be transformed. Governments are called upon to set this process in motion by initiating it or by actively supporting it. Equally, the shippers' councils may want to seek external assistance in this essential restructuring exercise.

Chapter IV

RECENT DEVELOPMENTS IN NATIONAL SHIPPING POLICIES

A. The linkage with international policies

96. On a global scale, UNCTAD, through decisions, resolutions and conventions adopted under its auspices, has aimed at creating a framework that would enable the shipping industry and shipping services to develop for the mutual benefit of developed and developing countries as well as for users and providers of shipping services. However, the ultimate test of the efficacy of decisions is not necessarily based on the logic of these decisions themselves, but on the degree of success in implementing policies pursued by the Committee. This implementation process is largely done through national shipping policies, if the international framework does not provide for directly implementable rights and obligations. The history of the Committee on Shipping also shows that the inclination to implement is not necessarily a function of the type of instrument adopted. Despite the fact that it may hold only a "moral" obligation, a resolution adopted by consensus may prove to be far more effective than a convention or similar instrument containing specific legal commitments, particularly if consensus was not readily forthcoming.

97. Linkage between national and international policies has also often been at the root of problems encountered in reaching agreement on specific issues pertaining to the international framework. Individual countries may have either attempted to impose their national policies or have considered them as fixed datum in international negotiations. In either case, the resultant inflexibility has not facilitated reaching a compromise in such negotiations.

98. A particular country's understanding and interpretation of the results of an international negotiating process is obviously of considerable importance to the process of translating an instrument into national policies and legislation. The United Nations Convention on a Code of Conduct for Liner Conferences provides a typical example for such divergence. Already the closing statements made following its adoption showed that there was no uniform understanding of the nature and the provisions of the Convention. Actual implementation by the contracting parties reconfirmed basic differences in interpretation and have thus been at the root of a number of difficulties in the relations between some trading partners which are parties to the Convention.

99. International and national policies are complementary and not substitutional. However, international instruments can only provide a framework within which national policy-makers act. For the development process of merchant marines of developing countries to be successful, the international community can create favourable general conditions aimed at ensuring a climate of fair competition for these carriers. Actual commercial success or failure of the national shipping industry will, however, rather depend on the national maritime policy pursued, among other commercial considerations.

100. As has already been stated, national policy approaches to merchant fleet development and trade-related aspects of shipping have differed widely among developing countries. [27] Yet, particularly during the 1970s and 1980s, the policy mix applied to merchant fleet development by most countries showed a clear preference for - sometimes extensive - regulatory policies, in particular cargo reservation policies. The immediate success in implementing these policies has been rather mixed, however. In a number of countries, the degree of actual implementation was limited as the existing national fleets were not in a position actually to carry the allotted shares. Consequently, extensive waiver systems were introduced, rendering the policy measures relatively ineffective in respect of achieving their objectives. In other cases, countries did not provide for the necessary administrative infrastructure to ensure the effective implementation of these measures. Additionally, cargo reservation policies have also, in those countries where these problems did not exist, been a mixed blessing for shipping companies. While they clearly granted national carriers a competitive advantage, they also resulted in an undue bilateralization of shipping services. As a result of this, shipping lines were largely confined in their activities to the carriage of national trade which was often too small to sustain commercially viable shipping operations.

B. Liberalization of trade in shipping services

101. Fundamental changes have taken place in national shipping policies. Starting in the mid-1980s, a number of Asian countries, reconsidering the balance of interest between foreign trade and national shipping, decided to loosen or even relinquish cargo-reservation policies previously pursued. Since then, in most of the developing countries of Asia and Latin America, new policies have been adopted - or are under consideration - generally favouring

liberalization of shipping, privatization or commercialization of State-owned enterprises, or encouragement of private-sector involvement and greater competition among shipping enterprises, national and foreign. These changing policy orientations need to be seen within a broader context of liberalization of the economies concerned. Shippers and shippers' councils have generally militated for such changes in the interest of exercising greater freedom of choice as regards the utilization of shipping enterprises and vessels as well as lower freight or charter rates.

102. The basic objectives of liberalized policies may be defined as an improvement in the quality of shipping services provided and a reduction in freight costs to the benefit of national foreign trade. While there are well-founded expectations that liberalization of shipping services, and consequently increasing competition, would actually bring about these results, only a few cases are known to the secretariat of countries where the actual effects of policies of liberalization were systematically assessed. One of these cases is Sri Lanka, where the policy of liberalization of shipping was given effect through a ministerial directive of 4 and 9 December 1989. A first assessment of the new policy was undertaken in October 1991 by a Committee appointed by the Sri Lanka Export Development Board. [28] With regard to the critical issues of quality of shipping services and freight rates, the report stated, *inter alia*:

> "... On the positive side, the most important result of the liberalization is the dramatic increase in shipping opportunities which have become available to Sri Lanka's exporters. On some routes, the number of sailings offered have in fact more than doubled ... .
>
> It is to be noted that the CSC still remains the most important carrier on the United Kingdom/Continent route. However, since liberalization of this route took place only with effect from 1 January 1991, it may be a little too early to determine whether the CSC would continue to maintain this position over the long-run.
>
> While there has been a dramatic improvement in the frequency of sailing as a result of liberalization, the results in respect of freight rates have not been spectacular. On some routes such as the United States, the liberalization had no impact on rates at all. The only major route which registered a substantial freight rate reduction was the Far East route, mainly in respect of tea. On most other routes there was a marginal drop at the outset which has been offset by recent freight rate increases. Insofar as individual export products are concerned, apart from the case of tea to Japan, a notable reduction in freight rates ranging around 15-20 per cent was experienced in respect of garment exports to North Continental, French and Italian ports, and of tea to Dubai and Jeddah."

103. The report concluded that:

> "... liberalization has produced very favourable results in terms of the frequency of shipping opportunities which have become available to shippers. The Sea Freight Study Committee in addition has concluded that there has been an improvement in the overall quality of shipping services. On the debit side, the Committee has concluded that difficulties have been experienced by small shippers, shippers to certain destinations and shippers of sensitive low-freighted cargoes. The general situation in respect of the level of uniformity and stability of freight rates cannot also be considered a favourable one. The problems that have manifested themselves cannot be expected to resolve themselves in a totally laissez-faire setting. In order to deal with these problems on a long-term basis, it is desirable that an appropriate policy package including such regulatory elements as are deemed necessary is put into place."

104. The aspect of increasing competition and thereby improving efficiency is intrinsically linked to liberalization processes. Consequently, the implementation of policies of liberalization should - and does - go along with the commercialization and privatization of State-owned national shipping industries. It is only when liberalization is under way that shipping can be freed from the public service function, with its inherent tendency to cover up inefficiencies, and can become a service industry in its own right, operating on the basis of commercial criteria. This, however, does not exclude that any country may be free to take into consideration - and will probably do so - non-commercial or non-economic objectives in formulating fleet development policies. The approach of commercialization is not incompatible with the pursuit of these objectives. It does, however, allow Governments to evaluate better the real costs of maintaining a fleet or portion of a fleet for non-economic reasons and thus adds to the rationality of its decisions.

105. The commercialization and, in particular, the privatization of national fleets require a number of preparatory and supporting measures. These concepts are not an end in themselves, but have to be seen as instruments aiming at the provision of more efficient shipping services. Consequently, they have to be accompanied by a regulatory

policy framework aiming at creating or maintaining a certain level of competition between operators. In other words, where State-owned national carriers may have enjoyed a monopolistic position with regard to the provision of certain services, it will not do to simply change the ownership of a company that continues to enjoy the same privileges, i.e. to transfer a public monopoly into a private monopoly. For the privatization of national shipping lines to be successful, the operation has to be very carefully planned and prepared by the Government. Issues to be taken into consideration when taking the necessary decisions include the following:

(a) The extent of government involvement

106. Particularly at the initial stage of privatization, Governments may decide to retain a certain portion of the shares of the privatized line. There are many reasons for this, such as assuring a continued minimum level of control in the company. It can also be based on considerations beyond the immediate sphere of the national line, for instance the limited capacity of the national capital market to raise the necessary equity capital. At any rate, the decision of a Government to privatize only partly is not an irreversible one; it can either be reconsidered at a later stage or be seen as a phased approach to privatization right from the outset. Whatever the decision, it would probably be advisable to limit government participation to minority share-holding in order to reduce the risk of a potential conflict of interest between the Government and the private sector, which in the case of government domination may jeopardize potential benefits to be derived from privatization.

(b) Privatization strategy

107. The general decision to privatize needs to be supplemented by an appropriate strategy to ensure the success of the privatization process. The period of transition from public to private ownership should be as brief as possible so as to avoid undue interruptions in operations. For a smooth transition, preparatory work is required with regard to policy formulation, legislative authorization, negotiations with the labour force, determination of the relationship between the government and the company, etc.

108. The decision to privatize a national line is not one that is taken in isolation, but part of a general change occurring in the ownership pattern prevailing in the national economy. This is important, as it may result in a phased approach to privatization. Otherwise, the strain on the country's capital market may be too great to sustain.

109. In order to avoid a situation where local capital markets cannot adequately respond to the requirements of privatization, a specific strategy is required. It might consist of maintaining government equity interest, privatizing only part of public companies, offering part of the equity capital to foreign investors, etc. There is clearly no general remedy to solve all problems; the merits of each potential solution would have to be assessed in the light of circumstances prevailing in each country.

(c) Commercialization

110. Commercialization is not a short-cut to privatization. To be successful it basically requires a framework similar to privatization. This approach simply eases the burden on capital markets, as no new equity capital is being sought. On the other hand, it may create a situation that could more easily have been resolved by privatization. The potential benefits of commercialization are, *inter alia*, independence from government interference in the management of the company and accountability of management for the performance of the company. These potential benefits, however, can only be realized if the freedom of decision-making is strictly honoured by the Government. Given the potential conflict between commercial viability and political considerations of the sole shareholder, this freedom is not always maintained easily. Yet, it is a basic prerequisite to the ultimate success of a commercialization strategy.

111. The prevailing move towards liberalization and privatization/commercialization has resulted in dramatic changes in national shipping policies in a number of countries. The types of policy pursued by different developing countries vary considerably, although this may be a passing phenomenon. Internal and external pressures brought to bear on Governments will eventually lead to a greater degree of acceptance of a more liberal stance on shipping policy issues. For this actually to happen, increased external assistance must be forthcoming to countries engaged in the implementation of policies, including the necessary restructuring of existing maritime institutions. Particularly with regard to national shipping lines, it must be borne in mind that uncompetitive entities will not become competitive simply by changing the policy framework. Commercial initiative, active assistance and cooperation may enable the companies to accomplish successfully the transition from public service industries to commercial entities.

Chapter V

ELEMENTS OF A STRATEGY TO PROMOTE PARTICIPATION BY DEVELOPING COUNTRIES IN THE PROVISION OF MARITIME AND RELATED TRANSPORT SERVICES

112. Any strategy that aims at ensuring a larger participation has to be developed against the background of:

- Structural and technological changes that have affected the shipping industry;
- Increasing capital-intensity of shipping and the transport industry;
- New concepts of integrated transport and logistics;
- The need for a fair balance between the interests of users and providers of maritime transport and related services;
- The need for a regionally differentiated approach to shipping by developing countries;
- A general tendency towards liberalization of maritime transport markets.

113. In the 1970s and 1980s, international shipping relations were characterized by the elaboration and entry-into-force of a number of intergovernmental agreements aimed at redressing the North-South imbalance in maritime markets. Over most of this period, hopes were high that the implementation of measures that had been agreed on in the various international forums would enable developing countries to expand their national fleets and enter into a phase of partnership with developed countries in maritime matters. In retrospect, looking back at two decades of development efforts, it must be realized that the hopes of the 1970s were only partly attained. While it is true that developing countries did obtain a significant share in world tonnage, it must also be conceded that the technology gap between developing and developed countries has, nevertheless, widened and at the moment there are no signs of this trend being reversed.

114. In the light of these tendencies, what are the prospects for developing countries for the 1990s? The starting point for the reconsideration of the maritime engagement of developing countries should be the quest for shipping services adequate to their foreign trade requirements. In parallel to this basic consideration, each country will have to take its own policy decision on the desirability and economic merit of developing a national merchant marine. This decision will not necessarily be one in favour of a national fleet, but can equally be a rational one against merchant fleet development based on the quality of services imported and the merits of investment alternatives. For those countries that opt for an active engagement in shipping, it will be necessary to reconsider actions and approaches taken to translate into economic realities the principle of increasing participation by developing countries, bearing in mind, however, the general changes in the policy framework governing the provision of shipping services. This entails, in principle, the liberalization of trade in shipping services and the determination of the potential for participation by developing countries in the provision of shipping services.

115. Additionally, in the context of UNCTAD's contribution, this future work will have to reflect the general policy orientations and the orientations for adapting the substantive work of UNCTAD agreed upon at the eighth session of UNCTAD. [29/] The work of UNCTAD in the field of maritime and related transport should thus be geared towards promoting a balance of interest between developed and developing countries in the context of a given liberal policy framework governing the trade in maritime services. In order to achieve such a balance of interest, it is first and foremost necessary to create the conditions for companies from developing countries and countries in transition to market economies enabling them to compete on commercial terms with established operators from developed countries. This is the more important as the general approach to shipping relations between North and South has seen a shift from the notion of fair competition, as typically embedded in the United Nations Convention on a Code of Conduct for Liner Conferences, towards free competition as pursued in the context of liberalization of trade in shipping services. This implies that developing countries' maritime transport industries will have to operate in a less protective environment than has been the case up to now. It has to be recognized, though, that the resulting process of liberalization could be a gradual one so as to avoid undue adverse effects on the development of national fleets.

116. In the field of regulatory policies, major problems have arisen with regard to market access. This question is addressed in the negotiations of an agreement on the liberalization of trade in services in the context of the Uruguay Round of GATT. Even though the outcome of these negotiations is not yet known, it is clear that future shipping policies will have to be geared towards minimizing market-access restrictions, be they based on regulatory policies or private sector restrictive business practices. The dismantling of effective market access restrictions will equally affect future implementation of the Code of Conduct for Liner Conferences [30/] and will thus hopefully contribute to a less controversial application of its principles and provisions.

117. In order to enable shipping companies of developing countries to compete effectively in international shipping markets without the protective umbrella of market access restrictions and cargo reservation measures, primary consideration will have to be given to the determination of factors inhibiting the effective participation of these carriers on commercial terms, and to propose remedial action. Such measures could be at the enterprise, national and international levels and could include both policy proposals and technical assistance action.

118. Commercial success or failure of shipping companies is to a large degree dependant on such factors as:

- Quality of management and shore-based personnel. This relates not only to a shortage of experienced staff, but equally to a lack of independence in managerial decision-making processes;

- Shortage of equity capital and insufficient access to capital markets to finance fleet modernization;

- Responsiveness to market requirements. Many shipping companies from developing countries need to be more responsive to market opportunities, rather than taking a national public service approach. In this context, it is important that companies be freed from political constraints and be placed in a position to offer specific services for which a market exists and which they can provide efficiently at competitive rates and conditions. This is the more important as technological developments and structural changes affecting maritime transport have made it more difficult to compete effectively on deep sea routes although they have, at the same time, created previously non-existent market niches, such as the provision of feeder services or the carriage of specific cargoes not easily containerizable.

These issues, among others, will have to be addressed by UNCTAD with a view to determining ways and means to resolve these problems in a spirit of partnership among all the parties concerned.

119. Clearly these problems cannot be resolved at the enterprise level exclusively. It will be equally necessary to elaborate a policy framework within which the maritime transport sector can develop to the benefit of world trade, in general, and to the developing countries concerned, in particular. Some elements of such a policy framework are set out below. [31/]

120. The change in policy direction towards liberalization and removal of market access restrictions is not simply an end in itself. Its purpose is to serve as a tool for the beneficial development of commercially viable shipping services and shipping companies. Large-scale elimination of protective policy elements, while unavoidable, will have to be handled with caution to avoid a situation where existing shipping companies disappear before they are even given the possibility to prove their commercial justification. The problems faced by a major part of the shipping industry of developing countries cannot be resolved overnight. Attainment of a truly liberalized market environment must thus follow a phased approach, including a transition period during which developing countries will be given sufficient time to undertake the necessary structural adjustments in their shipping engagement. It is important that the notion of transition not be understood as involving a time-frame only, but above all be viewed as a cooperative endeavour with the active participation of developed countries, geared to achieve the necessary restructuring as quickly and smoothly as possible.

121. Commercialization and privatization will be important factors in the future work of UNCTAD in the field of maritime and related transport services. In this context, prime consideration might be given to commercialization programmes expected to yield positive results similar to privatization, while avoiding some of the pitfalls of the latter. Privatization, as a concept aimed at increasing the competitiveness of developing countries carriers, will have to be seen in the wider context of private sector involvement in the productive sector of any given country. [32/] In view of the need for a generally consistent approach to privatization and the limited capabilities of local capital markets to satisfy resulting equity funding requirements, any approach to privatization will have to be closely coordinated with

the work undertaken in the Working Group on Comparative Experience with Privatization, established pursuant to decisions taken at UNCTAD VIII.

122. The new policy framework will also have to give due attention to the protection of shippers' interest, thus ensuring a fair balance between the interests of shippers and carriers. Policies to promote the development of merchant marines cannot be pursued at the expense of the trading community. The same goes for the establishment of implementation mechanisms at the national level. In this context, Governments particularly would be called upon to reconsider policies and institutional structures with a view to ensuring the maintenance of this desirable and necessary balance.

123. Increasing privatization and increasing recognition of problems at the industry level inhibiting the production of efficient and exportable maritime services will have to be reflected in the deliberations on shipping matters within UNCTAD. Consequently, the dialogue between Governments and the private sector will need to be intensified. Private sector participation in shipping deliberations is by no means new to UNCTAD. Both suppliers and users of shipping services were regularly involved in the work of the Committee on Shipping and subsidiary organs. Nevertheless, the participation of the private sector needs to be upgraded from its past ad hoc nature and be institutionalized. While a final decision on any action rests with Governments, the operators must be closely involved in the deliberations from as early a stage as possible. In this context, it is particularly important that operators from developing countries be adequately represented so as to avoid any possible monopolization of private sector opinions by developed countries' operators and their associations. This would in many cases imply that developing countries' users and providers of shipping services be assisted in creating the necessary institutional structures to ensure the effective representation of their interest.

124. In the following, some specific policy elements outlined have played a certain role in the deliberations of UNCTAD and may be expected to continue to do so. In fact, their importance can only increase in the context of the desired further liberalization of trade in shipping services. In light of these policy changes, an expert group convened by the Secretary-General of UNCTAD made recommendations for future action by Governments and by international organizations. [33/] A number of these recommendations specifically call on UNCTAD to:

- Study national shipping policies being undertaken in different countries on liberalization, privatization, etc., and evaluate them;

- Carry out a study on national arrangements for fostering a competitive international shipping industry;

- Carry out a study on factors which determine the success or failure of developing countries in shipping. Such a study may take into account the wider or macro-economic impacts of shipping in developing countries;

- Review and update the recommendations for economic cooperation among developing countries in the field of shipping, ports and multimodal transport;

- Carry out further in-depth analysis of the on-going structural and technological developments affecting shipping;

- Promote manpower development in developing countries, taking into account new policy measures and the new roles being suggested for shipping lines, shippers' councils and other shipping enterprises;

- Provide assistance to developing countries, upon request, in policy formulation at the national level.

Economic cooperation among developing countries (ECDC)

125. The importance and the potential benefits which may be obtained through economic cooperation among developing countries have been fully recognized by UNCTAD VIII which - in a broader context - has reconfirmed ECDC as one of the major instruments to achieve self-reliance of developing countries. Apart from the more general work undertaken by UNCTAD, the concept of ECDC has also figured prominently in the elaboration of the Committee on Shipping. This is, in particular, reflected in the work of a Group of Experts convened in 1989 which resulted in a number of recommendations for the framework and modalities of ECDC in shipping. [34/]

126. Despite the various decisions and resolutions of the suspended Committee on Shipping and the pertinent recommendations formulated by the Group of Experts, implementation of ECDC principles has largely been lagging behind. While subregional agreements exist at the political level, these have rarely gone beyond general declarations and have led neither to a veritable harmonization of policies nor to cooperation arrangements at the operational level. The current difficulties of the shipping industries of a large number of developing countries may to a considerable extent be owing to the apparent lack of insight into the need for cooperative action. The majority of developing countries will not be able to continue efforts to develop merchant marines within the confines of national boundaries with any reasonable expectation of commercial success.

127. The type of cooperation undertaken will definitely vary from region to region. At the policy level, it will be necessary to arrive at a harmonization of policies and to overcome the presently existing problems of bilateralization of maritime trades. In order to do so, a concerted approach to liberalization of shipping markets is necessary. This would create the framework for the development of commercially attractive shipping services. At the operational level, opportunities exist beyond the "traditional" approach of joint ventures, multinational companies, etc. Intermediate solutions may be chosen, such as rationalization of services, slot chartering arrangements or cooperation on fleet management.

128. Another potential role for ECDC at the subregional level may be derived from the introduction and increasing use of transhipment, both in the context of rationalized point-to-point services and round-the-world container shipping services. In this context, developing countries' operators will have to determine their own strategies either as main line carriers or feeder operators. Joint feeder operations may often provide for the market niches allowing for commercially viable shipping operations. Such an approach may be more promising for many carriers than trying to compete on deep sea routes. As an additional advantage, a strategy of providing feeder services to main line mega carriers could equally cover much needed intra-regional transport services, an indispensable prerequisite for regional economic integration policies.

129. Whatever the actual areas of operational cooperation may be, they have to be decided on in the light of specific difficulties faced by developing countries' operators in providing efficient and competitive maritime transport services. Cooperation and, in particular, ECDC is not an end in itself, but only a means of attaining policy objectives. It thus has to compete with other measures that may equally target the same policy objective.

130. In its future deliberations on cooperation in general and ECDC, in particular, the Committee will have to avoid some major pitfalls which rendered past ECDC work less effective than anticipated. The diversity of development stages and national policy objectives cannot be ignored in work on North-South and South-South cooperation. Additionally, it is essential that the operators seeking cooperation be directly involved in the deliberations. After all, Governments can only undertake the - albeit important - task of creating a policy framework for cooperation; implementation essentially rests with the operators, be they private or public. Consequently, the Committee may wish to take a selective approach to cooperation, in general, and ECDC, in particular. Whether the criterion is substantive or regional, it should in any case include all stages from policy design to monitoring the implementation of specific arrangements.

The Code of Conduct and its implementation

131. Following the Review Conference and taking into account the guidelines and resolution adopted by it, consideration should be given to the strategies that should be adopted by the Committee with regard to Code implementation in the years to come. The Code itself was formulated in the early 1970s and reflects the structure of the liner shipping industry, the policies and aspirations of developing countries with regard to national merchant fleet development and the problems encountered by developing countries both in terms of shipper protection and national fleet development *vis-à-vis* conference dominated liner trades prevailing at that time.

132. The Review Conference took note of the fundamental transformation that has taken place in liner shipping in terms of both technology and structural arrangements since the Code was adopted. [35] The guidelines adopted by the Review Conference have sought to take these developments into account in Code implementation, to a certain degree. However the technological and structural changes that have taken place and continue to take place are certainly of a character and magnitude that would make it quite impractical to seek to accommodate all of them effectively within the framework of the Code. For example, the size of vessel which is economically viable in containerized trades in the context of intermodalism and transhipment renders it quite impractical for many developing

countries to seek to own and operate vessels viably based on an exclusive or even preponderant dependence on national cargoes. Furthermore, the patterns and magnitudes of transhipment of liner cargoes make it virtually impracticable in many cases to administer any form of cargo-sharing like that of the conventional port-to-port liner services. These recent developments are compounded by the extent of the growth of non-conference lines. Equally significant is the increasing trend towards super-conferences and trade-wide stabilization agreements which appear to be eclipsing the traditional conferences with regard to both tariff formation and trade sharing. Therefore, any attempt to rationalize liner shipping trades must necessarily address itself to the common concerns of both conference and non-conference operators.

133. With regard to shipper-shipowner relations, the principles and the machinery set out in the Code would appear to be, by themselves, insufficient in the context of considerations such as the reduced share of cargo carried by liner conferences, the simplification of tariffs into FAK and commodity box rates, the development of service contracts, the growth of NVOCCs, and the relative decline in the importance of freight rates *vis-à-vis* the total service package offered by shipping lines and multimodal transport operators.

134. Having regard to the continuing technological and structural changes in liner shipping and the evolving policies of economic liberalization, privatization and commercialization, particularly in developing countries and in countries in transition to market economies, the implementation of the Code in the years to come should be conceived of broadly in a perspective that accommodates the following parameters:

- fleet development should be looked upon not so much in narrow national terms, but in a broader perspective that involves subregional cooperation, cooperation between trading partners and shipping consortia, joint ventures, and regional shipping lines;

- for smaller countries, the main theme should be the encouragement of NVOCCs and container slot chartering;

- trade sharing should be envisaged not at a narrow national level, but at a broader subregional or even regional level;

- trade-sharing arrangements should not be cargo-share oriented, but relatively flexible relating to sailing schedules and box capacities;

- trade sharing should be based on commercial cooperation;

- open trades in liner shipping should be encouraged in the interest of both shippers and shipping lines of all countries;

- participation in cross trades and feeder services should be seen as important elements of fleet development for developing countries;

- protection of shippers through national legislation and strengthening of shippers' organizations should be encouraged, and should go beyond the traditional concept of freight rate negotiations.

The United Nations Convention on Conditions for Registration of Ships

135. Relatively restricted regulatory policies applied to certain market segments have also had the effect of limiting the choice of shipowners, particularly in developing countries, of the flags they could reasonably fly. Recent policies of liberalizing market access and of granting owners certain facilities such as bareboat chartering have eased the linkage between the flag and cargo access and have thus contributed to renewed interest in the United Nations Convention on Conditions for Registration of Ships as an instrument of assuring minimum standards for ship registration.

136. The United Nations Convention on Conditions for Registration of Ships, adopted on 7 February 1986, establishes the conditions which should be applied by countries when registering vessels under their flag. To this end, it introduces new standards of responsibility and accountability for the world shipping industry. For the first time an international instrument now exists which defines the elements of the "genuine link" that should exist between

a ship and the State whose flag it flies. The Convention filled a major gap in international maritime jurisprudence, as the components of the "genuine link" had never been identified.

137. Articles 8, 9 and 10 - the heart of the Convention on Conditions for Registration of Ships - provide for participation by nationals of the flag State in the ownership, manning and management of ships, thus establishing key economic links between a ship and the flag State which are often missing in present practice. A distinctive feature is that States have an option to choose between the two articles on ownership and manning. This element of flexibility was introduced to take account of the different conditions prevailing in flag States. Some might lack sufficient manpower among their nationals or "persons domiciled or lawfully in permanent residence" within their territory to provide for significant participation by nationals in the crews of ships flying their flag, while other might not have sufficient capital to participate effectively in ship ownership. Among the important provisions of the article on manning is one stating that the State of registration shall ensure that the manning of its ships "is of such a level and competence as to ensure compliance with applicable international rules and standards, in particular those regarding safety at sea." Another part of that article stipulates that the State of registration shall ensure that the terms and conditions of employment "are in conformity with applicable international rules and standards" and that "adequate procedures exist for the settlement of civil disputes between seafarers employed on ships flying its flag and their employers."

138. A balanced approach is evident in the article on management. On the one hand, the principle was set out that before entering a ship on its register of ships, a State of registration would ensure that the shipowning company or its subsidiary was established and/or had "its principal place of business within its territory." On the other hand, where this was not the case, the flag State was expected to ensure that there was "a representative or management person who shall be a national of the flag State or be domiciled therein." The article on management is also significant in that it makes the State of registration responsible for ensuring that persons accountable for the management and operation of ships are in a position to meet the financial obligations that may arise from the operation of such ships and to cover risks which are normally insured in international maritime transportation in respect of damage to third parties.

139. Another important article (article 5) in the instrument provides for the establishment by a flag State of a "competent and adequate national maritime administration which shall be subject to its jurisdiction and control," and which is charged with a number of specific mandatory tasks such as ensuring that a ship flying its flag complies with the State's "laws and regulations concerning registration of ships and with applicable international rules and standards concerning, in particular, the safety of ships and persons on board and the prevention of pollution of the marine environment," and ensuring that it carries on board documents, "in particular, those evidencing the right to fly its flag and other valid relevant documents." At present a number of States do not have such national maritime administration.

140. The Convention will enter into force 12 months after the date on which 40 States owning together at least 25 per cent of the world tonnage have become Contracting Parties to it. Up to the end of March 1992, eight countries had become Contracting Parties while a further nine countries had signed subject to ratification.

141. The Committee may wish to take a more active role in promoting the entry into force of the Convention for a number of reasons. Past years have seen a certain proliferation of registries that were not always in a position to fulfil the basic conditions for registration and thus provide for an effective control over ships flying their flags. The increasing competition among registries calls for a minimum framework that the Convention provides in order to avoid that such competition results in conditions for registration below the commonly agreed bottom line. Additionally, a certain harmonization of registration conditions would help to reduce or minimize potential distortions of commercial competition among carriers due to the cost consequences of greatly varying registration conditions.

142. A further aspect of conditions for registration of ships that increasingly gains in importance is related to the aspect of protection of the marine environment. Even though maritime transport provide for a relatively "environment friendly" mode of transportation, it is still essential that minimum control be exercised over shipowners to respect national and international regulations on safety of navigation and protection of the environment. The Convention on Conditions for the Registration of Ships, particularly through its provisions on the need for a "competent and adequate national maritime administration" (article 5), can create a pre-condition for the maintenance of internationally agreed standards.

143. Another issue to be looked into in this context is the relationship between flag State and port State control. In fact, adherence to the provisions of the Registration Convention would place the duties of establishing and adhering to standards where they primarily belong, i.e. with the State whose flag the ship is flying. It is clear, though, that even adherence to the Convention would neither obviate the need for port State control, nor the desire of certain countries to effect such controls. Neither does the Convention in any way infringe on the right to port State control. Yet, the Convention might ease the burden of developing countries particularly to assure effectively port State control, especially for reasons of environmental protection. The competent maritime administration called for in article 5 of the Convention is often not available in developing countries and it will take time and effort to establish such administration. Hence, it may not be realistic to call for a system of port inspectorates to be set up in these countries, which will consequently depend on a functioning flag State control for the foreseeable future.

Notes

1/ See also paras. 104-111 and 120

2/ The activities of transnational corporations have an important impact on the world economy and on the economies of many developing countries. Thus, according to a recent United Nations report, "The 1980s have witnessed major changes in the world production system, with TNCs being the principal forces shaping the future of technological innovation." See Transnational Corporations in World Development - Trends and Prospects; United Nations Centre on Transnational Corporations, 1988.

3/ The "commodity problem" is particularly acute for African countries, in the large majority of which the share of the three leading commodities comprise over 80 per cent of export earnings. The precarious situation of developing countries is analysed in greater detail in the annual Trade and Development Report issued by UNCTAD.

4/ See also JAMRI, World's LNG Situation and LNG Carriers, Tokyo 1988.

5/ At mid-1990 excess capacity in tanker shipping was still estimated at above 40 million dwt or about 15 per cent of the world tanker fleet. See UNCTAD, Review of Maritime Transport, 1990, TD/B/C.4/340, pp. 24-28.

6/ Figures based on Lloyd's Shipping Economist, various issues.

7/ This relates in particular to proposed energy/carbon taxes.

8/ See para. 4.

9/ Containerisation International Yearbook, various issues.

10/ Goss, R., "World Shipping to the year 2000" in Korea Maritime Institute, Changes in the world shipping environment and counter-strategies towards the year 2000, Seoul, 1988, p. 13.

11/ Turner, D. and Meyrick, S.J., "Container shipping in the ESCAP region", presented at the Fourth World Container and Intermodal Congress, Kuala Lumpur, 1991.

12/ Excerpts from an address delivered by C. Abraham, reprinted in American Shipper, September 1991, pp. 62-63.

13/ See Press release by the European Commission of 1 April 1992.

14/ C. Abraham, op. cit.

15/ Sager, K.H., "How to cure container shipping? - Abolish the 'old conferences'!", Journal pour le transport international, No. 27/1991, pp. 2,395-2,396.

16/ See, for example, Kruse, H.J., "The Future of Liner Conferences", HANSA, No. 17/18, 1990, pp. 974-975; Dejou, Y., "Towards a reform of maritime tariffs", Journal pour le transport international, No. 42/1990, pp. 3,847-3,849; or von Rohr, W., "Shippers' needs and anti-competitive problems of liner conferences", Shipping and Trade News, 14 August 1990, p. 1, 15 August 1990, p. 1 and 16 August 1990, p. 1.

17/ See Dejou, Y., op cit..

18/ As of 1 July 1990, the age distribution of the general cargo fleet of developing countries was the following:

0.4 years old: 4.3 per cent
5-9 years old: 13.6 per cent
10-14 years old: 33.1 per cent
15 years and over: 49.0 per cent

with an average age of 15.8 years. See UNCTAD, Review of Maritime Transport, 1990, table 11, TD/B/C.4/340, New York, 1991.

19/ See UNCTAD, Review of Maritime Transport, various issues.

20/ See paras. 66-68.

21/ These are Hong Kong, Korea (Republic of), China, India, Iran (Islamic Republic of) and Singapore.

22/ These add Kuwait, the Philippines, Pakistan and Indonesia. See UNCTAD, Review of Maritime Transport, 1990, table 5, TD/B/C.4/340, New York, 1991.

23/ See Chapter I.C.

24/ See paras. 65 and 66.

25/ The specific issue of privatization is also dealt with in chapter IV.

26/ In 1990, about 75 per cent of Malawi tobacco was shipped via Durban.

27/ See also Chapter III.

28/ Report of the Committee appointed by the Sri Lanka Export Development Board to make a study on sea freight under the World Bank assisted Third Industrial Development Project (IDP III) - January to October 1991.

29/ See UNCTAD, Strengthening national and international action and multilateral co-operation for a healthy, secure and equitable world economy, TD/L.339, Cartagena de Indias 1992.

30/ See also paras. 131-134.

31/ See also paras. 125-143.

32/ The questions of commercialization and privatization are also dealt with in Chapter IV above.

33/ See UNCTAD, Report of the Expert Group on Shipping Policy (TD/B/CN.4/6).

34/ See UNCTAD, Report of the Group of Experts on Economic Co-operation among Developing Countries in Shipping, Ports and Multimodal Transport, TD/B/C.4/321-TD/B/C.4/AC.10/3, Geneva 1989.

35/ See UNCTAD, Views of Governments on the Review Conference, TD/CODE.2/3, Geneva 1988 and Issues for the Review Conference, TD/CODE.2/4, Geneva 1988.